

**WEST** Generate Collection  Print

L12: Entry 4 of 6

File: PGPB

Feb 21, 2002

DOCUMENT-IDENTIFIER: US 20020023215 A1

TITLE: Electronic transaction systems and methods therefor

Pre-Grant Publication Date (1):  
20020221

Detail Description Paragraph (74):

[0108] One of the preferred embodiments is using an Internet enabled cellular telephone (e.g., a web phone), a wireless PDA or a wireless two way pager to implement the PEAD to perform the above applications. The description below uses an Internet enabled cellular telephone as example of the implementation, and those skilled in the art will understand that the same or similar method can be applied to wireless PDAs and two way pagers. The Internet enabled cellular phone (web phone) can communicate with the Internet through a wireless network. For example, currently SprintPCS provides an Internet phone service using NeoPoint 1000 web phone. The web phone can access the Internet through a wireless gateway, and can contact the hotel's Internet reservation system through the wireless network and Internet. The software and/or firmware controls the PEAD functions running in the web phone is called eSignX Agent (or xAgent for short). xAgent is under the user's control to contact the hotel reservation transaction system. The reservation transaction process includes: (1) the web phone (PEAD) sending out the reservation request (optional using merchant public key [in the example given here, the merchant is the hotel, then it would be the hotel's public key or its certificate] to encrypt the request; optionally using the user's private key to sign the request); (2) the Merchant acknowledges with the service availability and the cost (optionally, this message can be encrypted using the user's public key and the hotel's private key); (3) once the user approves the transaction, the web phone sends out the transaction confirmation with the credit information and signed by the user's private key (optionally encrypted with the Merchant's public key); (4) once the Merchant validates the transaction, the Merchant sends out the service information as well as the service authorization token (the token could be the electronic room key in the hotel reservation example, the token could be the electronic ticket in the Airline Ticket Reservation and Theater Ticket reservation examples, or the token could be the Supermarket coupon etc.). The token is optionally encrypted by the user's public key and Merchant's private key; (5) when the service is rendered, a service authorization token is to be presented over the point of service (example, hotel room door, airport boarding gate, or theatre entrance, Supermarket check-out counter or rental car etc.) through the wireless network and Internet; (6) if the service authorization token has been validated at the point of service (e.g., decrypting the token using the Merchant's public key successfully) then, the Merchant can authorize the service (e.g., to open the hotel room, to permit the boarding at the airport gate, to admit entering the theater, to discount the transaction amount, to ignite a car, etc.).

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L12: Entry 4 of 6

File: PGPB

pub.

Feb 21, 2002

PGPUB-DOCUMENT-NUMBER: 20020023215  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020023215 A1

filed 6/10/02

TITLE: Electronic transaction systems and methods therefor

PUBLICATION-DATE: February 21, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Wang, Ynjiun P.	Cupertino	CA	US	
Ding, Joshua C.	San Jose	CA	US	
Grizzard, James A.	San Jose	CA	US	

APPL-NO: 09/792224 [PALM]  
DATE FILED: February 23, 2001

## RELATED-US-APPL-DATA:

Application 09/792224 is a continuation-in-part-of US application 09/668213, filed September 22, 2000, PENDING

Application 09/668213 is a continuation-in-part-of US application 09/523825, filed March 13, 2000, US Patent No. 6175922

Application 09/523825 is a continuation-in-part-of US application 09/067176, filed April 27, 1998, US Patent No. 6282,656

Application 09/067176 is a continuation-of-US application 08/759555, filed December 4, 1996, US Patent No. 5917913

INT-CL: [07] H04 L 9/00, H04 K 1/00

US-CL-PUBLISHED: 713/171; 713/184, 380/259, 380/277

US-CL-CURRENT: 713/171; 380/259, 380/277, 713/184

REPRESENTATIVE-FIGURES: 2

## ABSTRACT:

A method and apparatus are disclosed for approving a transaction request between an electronic transaction system and a portable electronic authorization device (PEAD) carried by a user using an electronic service authorization token. The method includes the steps of receiving at the PEAD first digital data representing the transaction request. The PEAD provides information to the user regarding an ability to approve the transaction request. When the transaction request is approved by the user, the PEAD receives second digital data representing the electronic service authorization token. In one aspect of the invention, the method and apparatus include a remote agent server that provides a bridge between the electronic transaction system and the PEAD. In an embodiment providing a further level of security, the private key is stored on the portable device, encrypted. The decryption key is stored outside of the device, at a trusted 3.sup.rd party location. When the user attempts to make a signature the software sends a request for the decryption key, along with the user's password or pass phrase keyed in at the keyboard of the PDA, smart phone, or cell phone, to a server belonging to the

trusted 3.sup.rd party. This password is usually, but not always, different than the password stored in the PEAD. The server checks the password or pass phrase and, if it is correct sends the decryption key to the portable device, where it is used once and immediately discarded. In yet another aspect of the invention, the user's password is securely encoded in the method and apparatus and are used at a point-of-sale location. Advantages of the invention include the ability to securely and conveniently perform transactions in a portable device.

#### RELATED APPLICATIONS

[0001] This application is a continuation in part of U.S. Ser. No. 09/668,213 filed Sep. 22, 2000, which is a continuation in part of U.S. Ser. No. 09/523,825 filed Mar. 13, 2000, now U.S. Pat. No. 6,175,922, which is a continuation in part of U.S. Ser. No. 09/067,176 filed Apr. 27, 1998, which is a continuation of U.S. Ser. No. 08/759,555 filed Dec. 4, 1996 now U.S. Pat. No. 5,917,913.

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L12: Entry 3 of 6

File: PGPB

Apr 25, 2002

DOCUMENT-IDENTIFIER: US 20020047775 A1

TITLE: RF remote appliance control/monitoring network

Pre-Grant Publication Date (1):20020425Detail Description Paragraph (33):

[0069] The UIRU 80 of each AMS 12 and relay unit 20' has a factory-assigned specific and unique serial number, as code resident in firmware, also resident in firmware chip are RF operating parameters for all three basic modes of communications (television, telephone, and data), and the routing table configured for determining a best use by the unit when power was first initiated. The RF communications parameters include frequency bands, bandwidth for each specific band, frequency allocation tables and RF transmitted power level restriction tables. Each of these items can be changed later by reprogramming the firmware chip via a remote download from the head-end transmitter (HTU 18) or by exchanging the firmware module. The operating parameters of firmware chips are preferably protected with a suitable encryption scheme and auto-erasable read protection that erases the firmware if an unauthorized read or copy of any sort is attempted. The firmware chip or module can also be remotely programmed to lock out a user due to lack of payment for services, or to change a table of authorized subscription services in the form of authorization codes for each subscription service optionally provided by the unit.

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L12: Entry 3 of 6

File: PGPB

Apr 25, 2002

PGPUB-DOCUMENT-NUMBER: 20020047775  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020047775 A1

TITLE: RF remote appliance control/monitoring network

PUBLICATION-DATE: April 25, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
del Castillo, Byron	Palmdale	CA	US	
Ginsburg, Diane L.	Palmdale	CA	US	
Rosen, Robert C.	Tujunga	CA	US	

APPL-NO: 09/ 929834 [PALM]  
DATE FILED: August 14, 2001

RELATED-US-APPL-DATA:

Application 09/929834 is a continuation-in-part-of US application 09/234968, filed January 19, 1999, PATENTED

INT-CL: [07] G05 B 23/02

US-CL-PUBLISHED: 340/3.54; 455/12.1  
US-CL-CURRENT: 340/3.54; 455/12.1

REPRESENTATIVE-FIGURES: 1

ABSTRACT:

A system for managing a distributed array of appliances includes a distributed array of the units, at least some of the relay units being appliance controllers having an appliance interface. At least some communications are relayed through at least two other relay units for coverage over a wide range using low power transceivers, based on automatically generated routing tables that are maintained in the relay units.

RELATED APPLICATION

[0001] This application is a continuation-in-part of application Ser. No, 09/234,968, filed on Jan. 19, 1999, now U.S. Pat. No. 6,275,166, which is incorporated herein by this reference.

## WEST

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L11: Entry 1 of 2

File: PGPB

May 23, 2002

PGPUB-DOCUMENT-NUMBER: 20020060246

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020060246 A1

TITLE: Method and apparatus for acquiring, maintaining, and using information to be communicated in bar code form with a mobile communications device

PUBLICATION-DATE: May 23, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Gobburu, Venkata T.	San Jose	CA	US	
Narayanan, Krishnakumar	Cupertino	CA	US	
Challa, Nagesh	Saratoga	CA	US	
Gannage, Michel E.	Los Altos	CA	US	

APPL-NO: 09/ 996847 [PALM]  
DATE FILED: November 19, 2001

## RELATED-US-APPL-DATA:

Application is a non-provisional-of-provisional application 60/252101, filed November 21, 2000,

Application is a non-provisional-of-provisional application 60/252346, filed November 20, 2000,

Application is a non-provisional-of-provisional application 60/313753, filed August 20, 2001,

INT-CL: [07] G06 K 7/10

US-CL-PUBLISHED: 235/462.46

US-CL-CURRENT: 235/462.46

REPRESENTATIVE-FIGURES: 1

## ABSTRACT:

A user is provided with a secure database containing information in diverse categories that relates to the user and that may be represented at least in part in bar code form and communicated with light from a mobile communications device. The diverse information is obtained from any combination of a variety of vendor and governmental computer systems, internet service providers, and communications devices. The user has access to the database using a mobile communications device for displaying, managing, and entering information, and for communicating information in bar code form with light. The user first selects the category that contains the specific item of information, and then selects the specific item of information. The specific item of information then is communicated in bar code form with light from the mobile communications device for scanning by a bar code scanner to obtain the desired good or service.

## CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of U.S. provisional application No. 60/252,101, filed Nov. 21, 2000 (Gobburu et al., Method and apparatus for acquiring, maintaining and using information to be communicated in bar code form with a mobile communications device, Attorney Docket No. A1132US1V); U.S. provisional application No. 60/252,346, filed Nov. 20, 2000 (Gobburu et al., Method and apparatus for acquiring, maintaining and using information to be communicated in bar code form with a mobile communications device, Attorney Docket No. A1132US0V); and U.S. provisional application No. 60/313,753, filed Aug. 20, 2001 (Gobburu et al., Method and apparatus for acquiring, maintaining and using information to be communicated in bar code form with a mobile communications device, Attorney Docket No. 10075.03); all of which are hereby incorporated herein by reference in their entirety.

**WEST** Generate Collection 

L11: Entry 1 of 2

File: PGPB

May 23, 2002

DOCUMENT-IDENTIFIER: US 20020060246 A1

TITLE: Method and apparatus for acquiring, maintaining, and using information to be communicated in bar code form with a mobile communications device

Pre-Grant Publication Date (1):20020523Detail Description Paragraph (37):

[0082] The user may, if desired, pay for tickets as well as other goods and services at a point-of-sale using her mobile communications device, and have the transaction recorded in an appropriate subordinate folder in the user's My Transactions database. Payment is made using any mobile payment technique, which may or may not involve the communication of information in bar code form. One example of a mobile payment technique is the smart card phone, which is a mobile phone that has a built-in smart card reader. The user places an order to purchase a good or service using the mobile phone in any desired manner. The merchant's server sends a payment request to the mobile phone. The user then inserts her smart card, which is a charge card with a small embedded computer chip that enables applications such as security, electronic purse, history, loyalty, identification, and so forth. The mobile phone requests a personal identification number ("PIN") to for authentication. If the PIN is correct, the phone assembles a data package containing the order number as well as the account information and shipping information from the smart card, and sends the data package to the merchant's server. The merchant's server in turn sends an order confirmation to the mobile phone and suitably places a record of the transaction in the user's My Transactions database. Another example of a mobile payment technique is the mobile-accessed bank wallet, or e-wallet. This technique involves having the user's account information stored on a bank's server. The user places an order to purchase a good or service using a mobile phone in any desired manner, and the merchant returns an order confirmation. The user then logs into her e-wallet on the bank's server using her name and PIN. Upon authentication, the mobile phone sends the order information to the bank's server and the user selects the account and shipping address. The bank's server sends the authorization information to the merchant's server, which in turn sends a confirmation to the user's mobile phone and suitably places a record of the transaction in the user's My Transactions database. Another example of a mobile payment technique is the storage of smart card data in the mobile phone itself. The user places an order to purchase a good or service using the mobile phone in any desired manner. The merchant's server sends a payment request to the mobile phone. The user's mobile phone contains a subscriber identity module ("SIM" card) which stores the user's authentication, account, and shipping information. The mobile phone requests a PIN to authenticate the user. If the PIN is correct, the phone assembles a data package containing the order number as well as the account information and shipping information from the subscriber identity module, and sends the data package to the merchant's server. The merchant's server in turn sends an order confirmation to the mobile phone and suitably places a record of the transaction in the user's My Transactions database. Another example of a mobile payment technique is mobile phone verification. The user places an order to purchase a good or service in any desired manner, even at a physical point-of-sale, and also provides her mobile phone number. The merchant's server sends a payment request to the mobile phone. The user reviews and confirms the order and enters her pin for authentication, and the user's mobile phone assembles and sends a data package to the bank's server. The bank's server sends the authorization information to the merchant's server, which in turn sends a

confirmation to the user and suitably places a record of the transaction in the user's My Transactions database. Another example of a mobile payment technique is redeeming a prepaid coupon or voucher, which is done in a manner similar to the redemption of any coupon. In this type of mobile payment technique, the coupon or voucher number is displayed on the user's mobile communications device or otherwise communicated with light as a bar code. The communicated bar code is scanned and processed by the vendor in a conventional manner. The payment processes mentioned above preferably are protected by suitable security measures such as encryption to prevent unauthorized access. Some of the proposals for mobile commerce are described on the web site of MasterCard International Incorporated of Purchase, New York, at [www.mastercardintl.com/newteclmology/mcommerce/whatis/payment.htm](http://www.mastercardintl.com/newteclmology/mcommerce/whatis/payment.htm), which is incorporated herein by reference in its entirety.

**WEST****End of Result Set**  

L7: Entry 1 of 1

File: USPT

Mar 11, 2003

US-PAT-NO: 6532298

DOCUMENT-IDENTIFIER: US 6532298 B1

TITLE: Portable authentication device and method using iris patterns

DATE-ISSUED: March 11, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cambier, James L.	Medford	NJ		
Siedlarz, John E.	Indian Mills	NJ		

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Iridian Technologies, Inc.	Moorestown	NJ			02

APPL-NO: 09/ 396083 [PALM]

DATE FILED: September 14, 1999

## PARENT-CASE:

RELATED APPLICATION DATA This is a continuation-in-part of U.S. patent application Ser. No. 09/310,302 which was filed May 12, 1999, which is a continuation-in-part of U.S. patent application Ser. No. 09/199,369 which was filed Nov. 25, 1998.

INT-CL: [07] G06 K 9/00

US-CL-ISSUED: 382/117; 340/5.82

US-CL-CURRENT: 382/117; 340/5.82

FIELD-OF-SEARCH: 382/110, 382/117, 382/115, 382/116, 351/206, 351/218, 351/209, 340/5.2, 340/5.52, 340/5.53, 340/5.81-5.83

## PRIOR-ART-DISCLOSED:

## U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4109237</u>	August 1978	Hill	340/146.3E
<u>4620318</u>	October 1986	Hill	382/2
<u>4641349</u>	February 1987	Flom et al.	382/2
<u>4876608</u>	October 1989	Eaton	358/443
<u>5055658</u>	October 1991	Cockburn	235/382
<u>5109390</u>	April 1992	Gilhousen et al.	375/1
<u>5151583</u>	September 1992	Tokunaga et al.	250/201.2
<u>5175758</u>	December 1992	Levanto et al.	379/57
<u>5187506</u>	February 1993	Carter	351/221
<u>5291560</u>	March 1994	Daugman	382/2
<u>5359669</u>	October 1994	Shanley et al.	382/6
<u>5392297</u>	February 1995	Bell et al.	371/22.6
<u>5404163</u>	April 1995	Kubo	348/142
<u>5448622</u>	September 1995	Huttunen	379/58
<u>5485486</u>	January 1996	Gilhousen et al.	375/205
<u>5572596</u>	November 1996	Wildes et al.	382/117
<u>5581630</u>	December 1996	Bonneau, Jr.	382/116
<u>5629981</u>	May 1997	Nerlikar	380/25
<u>5646709</u>	July 1997	Carter	351/218
<u>5719950</u>	February 1998	Osten et al.	382/115
<u>5751260</u>	May 1998	Nappi et al.	345/8
<u>5751836</u>	May 1998	Wildes et al.	382/117
<u>5790957</u>	August 1998	Heidari	455/553
<u>6289113</u>	November 2001	McHugh et al.	382/117

## FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
97302580.2	April 1997	EP	
9611787.4	June 1996	GB	
9621900.1	October 1996	GB	
WO 97/21188	June 1997	WO	
WO 97/46978	December 1997	WO	
WO 97/46979	December 1997	WO	
WO 97/46980	December 1997	WO	
WO 98/08439	March 1998	WO	
WO 98/32093	July 1998	WO	

ART-UNIT: 2611

PRIMARY-EXAMINER: Mehta; Bhavesh

ATTY-AGENT-FIRM: Woodcock Washburn LLP

ABSTRACT:

A compact, handheld imaging apparatus which can be used to capture high-quality iris images for identification of a person. The handheld iris imager is non-invasive and non-contacting and comprises a camera, a cold mirror, a lens, and an illuminator. The imager has sensors and indicators which assist a user in aligning and focusing the device. The imager also automatically captures the image when proper positioning is achieved. A template of the image is then transmitted to a receiver in a vehicle or other asset and compared to a database of previously stored templates of images to identify the person. The imager is part of a security module to protect access to an asset such as a vehicle or residence. The vehicle or residence cannot be unlocked and used unless a user has been identified and authorized by the imager and a controller system.

12 Claims, 17 Drawing figures

**WEST****End of Result Set** [Generate Collection](#) 

L8: Entry 1 of 1

File: USPT

Mar 11, 2003

DOCUMENT-IDENTIFIER: US 6532298 B1

TITLE: Portable authentication device and method using iris patterns

US Patent No. (1):  
6532298Detailed Description Text (30):

Specific implementation features of the preferred focus assessment system and method which enable its real-time operation, include (1) the computation of quantities in the 2D Fourier domain, without needing to compute an actual 2D Fourier Transform of an image (this avoids the need for approximately 2.25 million floating-point operations required for an FFT (Fast Fourier Transform) on a 500.times.500 pixel image, as the computational complexity of an FFT on n .times.n data is  $O(n^{sup.2} \log_{sub.2} n)$ ); (2) only 6,400 integer multiplications (squarings) are performed, which in turn can be eliminated altogether by using small look-up tables; (3) no floating-point operations are required; (4) computation of focus scores is based upon simple algebraic combinations of pixel values within local closed neighborhoods, repeated across regions of the image; and (5) these operations not only allow the algorithm to execute in real-time, but it also enables a straightforward implementation in simple, low-cost, hardware devices that could be embedded within a digital camera or frame grabber.

Detailed Description Text (76):

Preferably, the imager 920 is compact, light weight, low cost, and battery-powered. IR LED illumination, CMOS imagers, low power embedded processors, nonvolatile RAM or EEPROM memory, and RF chipsets designed for 900 MHz or 2.4 GHz public use frequency bands can be used. The controller system 940 can rely on external power from the vehicle storage battery or public utilities (in the case, for example, of a residence or office).

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L12: Entry 6 of 6

File: DWPI

Jan 31, 1995

DERWENT-ACC-NO: 1995-081803

DERWENT-WEEK: 199511

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TITLE: Automatic actuation of cellular telephones - has control program which desired pair of hardware and firmware drivers with operating circuitry and command necessary for controlling selected telephone

INVENTOR: COOPER, G N

PATENT-ASSIGNEE: ALLIANCE RESEARCH CORP (ALLIN)

PRIORITY-DATA: 1994US-0177275 (January 4, 1994)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 5386455 A	January 31, 1995		007	H04M011/00

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
US 5386455A	January 4, 1994	1994US-0177275	

INT-CL (IPC): H04 M 11/00

ABSTRACTED-PUB-NO: US 5386455A

## BASIC-ABSTRACT:

The system, interacting with an activating computer of a local cellular telephone carrier and a cellular telephone unit, for the automatic remote activation of the cellular telephone with the carrier has a CPU containing and operating in accord with a control program. The CPU stores hardware and firmware drivers with the operating circuitry and commands necessary for controlling a selected cellular telephone. The control program selects a desired hardware and firmware driver for activation programming of the cellular telephone.

An input allows manual data input into the CPU. A cable connects the CPU to the Input/Output data interface bus port for transferring data. A modem transfers data between the CPU and a local carrier authorising computer. The control program transfers manually received data to the activating computer and transfers data from the activating computer to the cellular telephone in accordance with the selected hardware and firmware drivers for activation programming of the cellular telephone.

USE/ADVANTAGE - Reduces time required for programming or activation. Insures correct exchange of activation programming information.

ABSTRACTED-PUB-NO: US 5386455A

## EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.3/3

DERWENT-CLASS: W01  
EPI-CODES: W01-B05A1A; W01-C02B6A;

**WEST****End of Result Set**  

L12: Entry 6 of 6

File: DWPI

Jan 31, 1995

DERWENT-ACC-NO: 1995-081803

DERWENT-WEEK: 199511

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**TITLE:** Automatic actuation of cellular telephones - has control program which desired pair of hardware and firmware drivers with operating circuitry and command necessary for controlling selected telephone

**Basic Abstract Text (2):**

An input allows manual data input into the CPU. A cable connects the CPU to the Input/Output data interface bus port for transferring data. A modem transfers data between the CPU and a local carrier authorising computer. The control program transfers manually received data to the activating computer and transfers data from the activating computer to the cellular telephone in accordance with the selected hardware and firmware drivers for activation programming of the cellular telephone.

**PF Publication Date (1):**19950131

**WEST****End of Result Set** [Generate Collection](#) 

L15: Entry 1 of 1

File: USPT

Jan 16, 2001

DOCUMENT-IDENTIFIER: US 6175922 B1

TITLE: Electronic transaction systems and methods therefor

US Patent No. (1):  
6175922

Detailed Description Text (73):

One of the preferred embodiment is using an Internet enabled cellular telephone (e.g. a web phone), a wireless PDA or a wireless two way pager to implement the PEAD to perform the above applications. The description below uses an Internet enabled cellular telephone as example of the implementation, and those skilled in the art will understand that the same or similar method can be applied to wireless PDAs and two way pagers. The Internet enabled cellular phone (web phone) can communicate with the Internet through a wireless network. For example, currently SprintPCS provides an Internet phone service using NeoPoint 1000 web phone. The web phone can access the Internet through a wireless gateway, and can contact the hotel's Internet reservation system through the wireless network and Internet. The software and/or firmware controls the PEAD functions running in the web phone is called eSignX Agent (or xAgent for short). xAgent is under the user's control to contact the hotel reservation transaction system. The reservation transaction process includes: (1) the web phone (PEAD) sending out the reservation request (optional using merchant public key [in the example given here, the merchant is the hotel, then it would be the hotel's public key or it's certificate] to encrypt the request; optionally using the user's private key to sign the request); (2) the Merchant acknowledges with the service availability and the cost (optionally, this message can be encrypted using the user's public key and the hotel's private key); (3) once the user approves the transaction, the web phone sends out the transaction confirmation with the credit information and signed by the user's private key (optionally encrypted with the Merchant's public key); (4) once the Merchant validates the transaction, the Merchant sends out the service information as well as the service authorization token (the token could be the electronic room key in the hotel reservation example, the token could be the electronic ticket in the Airline Ticket Reservation and Theater Ticket reservation examples, or the token could be the Supermarket coupon etc. The token is optionally encrypted by the user's public key and Merchant's private key; (5) when the service is rendered, a service authorization token is to be presented over the point of service (example, hotel room door, airport boarding gate, or theater entrance, Supermarket check-out counter or rental car etc.) through the wireless network and Internet; (6) if the service authorization token has been validated at the point of service (e.g. decrypting the token using the Merchant's public key successfully) then, the Merchant can authorize the service (e.g. to open the hotel room, to permit the boarding at the airport gate, to admit entering the theater, to discount the transaction amount, to ignite a car, etc.)

Detailed Description Text (76):

It is also possible to use an ordinary cellular phone not necessarily having web capability to perform both above Service Reservation Transaction and Point-of-Sale Transaction by using a remote voice activated or touch tone server. For example, this is called an Agent Server. The Agent server functions exactly like the PEAD in a Web phone except it is not necessarily portable. It operates through the existing voice activated or touch tone interfacing with the end user through the existing phone network. Once the user registers an xAgent in the Agent Server, the ordinary

cellular phone end user can enjoy all the same functionality as the Web phone user. For example, the end user can use the ordinary cellular phone to dial in to the Agent Server to activate his own xAgent by entering his xAgent password through voice activated interface or touch tone interface. Once xAgent is activated, it can reserve a hotel room, order tickets, pay at a point-of-sale counter through the Agent Server, just as if it were running on a Web phone. For example, the end user can reserve the a hotel room, once the xAgent gets the approval from the user's cellular phone, the xAgent running on the Agent Server can exchange the credit information pre-stored in the xAgent and sign the transaction. The hotel can issue the electronic room key to the xAgent in the Agent Server just the same as to the PEAD. When the end user arrives at the hotel, he can dial the Agent Server number to request to activate the electronic room key stored in the xAgent to open the door through the Internet. Similarly, all other applications that can be conducted through a Web phone, can also be conducted by the ordinary cellular phone plus the remote running xAgent in the Agent Server.

**WEST****End of Result Set** [Generate Collection](#) 

L4: Entry 1 of 1

File: USPT

Jun 29, 1999

DOCUMENT-IDENTIFIER: US 5917913 A

TITLE: Portable electronic authorization devices and methods therefor

US Patent No. (1):  
5917913Detailed Description Text (29):

Again, note that access to program/data memory 504 and the data therein (e.g., the user identification data and the user's private key) can only be made by logic circuitry 502. For example, the user identification data and the user's private key can only be written into program/data memory 504 if this data has been properly encrypted with the issuer's private key. Access to these memory blocks for writing thereto may also be restricted by logic circuitry 502 under appropriate software and/or firmware control.

**WEST****End of Result Set** [Generate Collection](#) 

L11: Entry 2 of 2

File: PGPB

Jul 26, 2001

PGPUB-DOCUMENT-NUMBER: 20010009849  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20010009849 A1

TITLE: Prepay telecommunications system

PUBLICATION-DATE: July 26, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
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APPL-NO: 09/ 793064 [PALM]  
DATE FILED: February 26, 2001

## RELATED-US-APPL-DATA:

Application 09/793064 is a continuation-of US application 09/399915, filed September 21, 1999, US Patent No. 6208851

INT-CL: [07] H04 Q 7/20

US-CL-PUBLISHED: 455/408; 455/432, 455/411  
US-CL-CURRENT: 455/408; 455/411, 455/432.1

REPRESENTATIVE-FIGURES: 1

## ABSTRACT:

The prepay telecommunications system (60) includes a prepay call management platform (50) which is directly coupled to a telecommunications carrier switch (24). A customer database (116) is coupled to the prepay call management platform (50) for storing prepay customer data, and a plurality of customer interface facilities (62, 64, 66, 68, 80) are provided for accepting customer prepayment and immediately updating the customer database (116). The prepay calls are recognized by the mobile identification number and is routed to the prepay call management platform (50) coupled to and co-located with the telecommunications carrier switch (24). The customer account balance associated with the prepay call is looked up in a customer database (116), and the maximum allowable call duration in response to the customer account balance is computed. The prepay call is then released to the telecommunications carrier switch (24) for line termination. At the same time, a call duration timer is started. The call is disconnected in response to the call duration timer reaching the maximum allowable call duration. The prepay telecommunications system is applicable to both wireless and non-wireless telecommunications systems.

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L11: Entry 2 of 2

File: PGPB

Jul 26, 2001

DOCUMENT-IDENTIFIER: US 20010009849 A1  
TITLE: Prepay telecommunications system

Pre-Grant Publication Date (1):  
20010726

Detail Description Paragraph (9):

[0024] In operation, cash, bank drafts, credit cards, and telephone company billing may be used to replenish the prepay wireless account at any customer interface facility 62. A deposit card (not shown) which has a magnetic strip, embedded chip, or another storage medium recording the customer's name and account number may be issued to each customer. Customer interface facilities 62 preferably employ data card readers 69 to obtain the information stored in the customer's deposit card and to immediately relay this information and the transaction amount to the customer's home prepay wireless platform 50. The transaction amount is then immediately posted to the customer's account to reflect the new balance. This transaction is similar to a credit card or debit card transaction at a point of sale (POS). If authorized, the customer may also dial a pre-assigned code with the wireless telephone to replenish his/her account with a credit card. Constructed in this manner, the customer may immediately begin to use the wireless services.

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L10: Entry 5 of 7

File: USPT

May 18, 1999

US-PAT-NO: 5905252

DOCUMENT-IDENTIFIER: US 5905252 A

TITLE: Card gate mechanism

DATE-ISSUED: May 18, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Magana; Leroy Esteban	Fontana	CA		

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE	CODE
ITT Manufacturing Enterprises, Inc.	Wilmington	DE				02

APPL-NO: 08/ 976947 [PALM]

DATE FILED: November 24, 1997

INT-CL: [06] G06 K 13/00

US-CL-ISSUED: 235/475, 235/483, 235/485

US-CL-CURRENT: 235/475, 235/483, 235/485

FIELD-OF-SEARCH: 235/495, 235/475, 235/449, 235/483, 235/375, 235/379, 235/380, 235/451, 235/485

## PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/> <u>3766687</u>	October 1973	Henson	235/61.11R
<input type="checkbox"/> <u>3850299</u>	November 1974	Kreitzer	235/61.7
<input type="checkbox"/> <u>4833310</u>	May 1989	Shimamura et al.	235/492
<input type="checkbox"/> <u>5017764</u>	May 1991	Hashimoto	235/454
<input type="checkbox"/> <u>5045674</u>	September 1991	Mita et al.	235/475
<input type="checkbox"/> <u>5061842</u>	October 1991	Payne	235/449
<input type="checkbox"/> <u>5146069</u>	September 1992	Orimoto et al.	235/475
<input type="checkbox"/> <u>5150352</u>	September 1992	Kurihara	235/475
<input type="checkbox"/> <u>5179504</u>	January 1993	Kitahara	235/475
<input type="checkbox"/> <u>5264686</u>	November 1993	Kitahara	235/475
<input type="checkbox"/> <u>5331138</u>	July 1994	Saroya	235/492
<input type="checkbox"/> <u>5360969</u>	November 1994	Suzuki	235/479
<input type="checkbox"/> <u>5466914</u>	November 1995	Kitahara	235/483
<input type="checkbox"/> <u>5484989</u>	January 1996	Kumar et al.	235/475
<input type="checkbox"/> <u>5505289</u>	April 1996	Watabe et al.	194/206
<input type="checkbox"/> <u>5532466</u>	July 1996	Konno et al.	235/472
<input type="checkbox"/> <u>5640307</u>	June 1997	Bleier et al.	235/475

ART-UNIT: 286

PRIMARY-EXAMINER: Porta; David P.

ASSISTANT-EXAMINER: Lee; Diane I.

ATTY-AGENT-FIRM: Peterson; Thomas L.

ABSTRACT:

Apparatus for use in an unsupervised public setting to receive a smart card so the card front portion can enter a card reader (20), which safeguards the card reader from vandalism. A card gate mechanism (30) includes a gate device (32) that is moveable between a closed position wherein it blocks the card path (16) and an open position which allows passage of the card to the card reader. At least one lever (34, 36, 38) has a card-engaging part (50, 52, 72) lying along the card path so the lever is deflected by the leading edge (46) of the card to release the gate device so it can open. Preferably, a plurality of card-engaging levers have card-engaging parts which must be deflected by the card leading edge to allow the gate to open, with at least one and preferably two of the levers deflected to the side of the card path by the leading edge of the card. The gate has a roller (100) that rolls along the top of the card when the gate is raised, to avoid scratching the card. A well (110) lies across the entire width of the card path between the card-passing slot and the gate device, to receive any debris that is inserted into the slot.

8 Claims, 9 Drawing figures

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L10: Entry 5 of 7

File: USPT

May 18, 1999

DOCUMENT-IDENTIFIER: US 5905252 A  
TITLE: Card gate mechanism

Application Filing Date (1):  
19971124

Detailed Description Text (2):

FIG. 1 shows a card receiving assembly or apparatus 10 for receiving a smart card C. One standard (according to American National Standards Institute) smart card has a width in the lateral direction L of 85.6 mm and a thickness or height in the vertical direction H of about 0.84 mm. A group of contact pads P on the lower face E of the card provide access to an embedded IC memory chip Q. The memory is read out and/or read-in, by inserting the card in the forward F longitudinal direction M through a card slot 12 in a housing 14 of the apparatus. When the card is inserted, its forward portion J moves forwardly along a card path 16 that has an axis 18 and to a card reader 20 that has contacts 22 for engaging the card pads. A switch lying about 1 mm rearward of the final position of the card leading edge, is activated by the card. This allows electronic circuitry 24 connected to the contacts 22 to at least read out information stored in the card. The apparatus 10 may be used to authorize placement of a telephone call, dispense goods or money, or otherwise provide authorizations.

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L10: Entry 2 of 7

File: USPT

May 2, 2000

DOCUMENT-IDENTIFIER: US 6058300 A  
TITLE: Prepay telecommunications system

Application Filing Date (1):  
19970204

Detailed Description Text (10):

In operation, cash, bank drafts, credit cards, and telephone company billing may be used to replenish the prepay wireless account at any customer interface facility 62. A deposit card (not shown) which has a magnetic strip, embedded chip, or another storage medium recording the customer's name and account number may be issued to each customer. Customer interface facilities 62 preferably employ data card readers 69 to obtain the information stored in the customer's deposit card and to immediately relay this information and the transaction amount to the customer's home prepay wireless platform 50. The transaction amount is then immediately posted to the customer's account to reflect the new balance. This transaction is similar to a credit card or debit card transaction at a point of sale (POS). If authorized, the customer may also dial a pre-assigned code with the wireless telephone to replenish his/her account with a credit card. Constructed in this manner, the customer may immediately begin to use the wireless services.